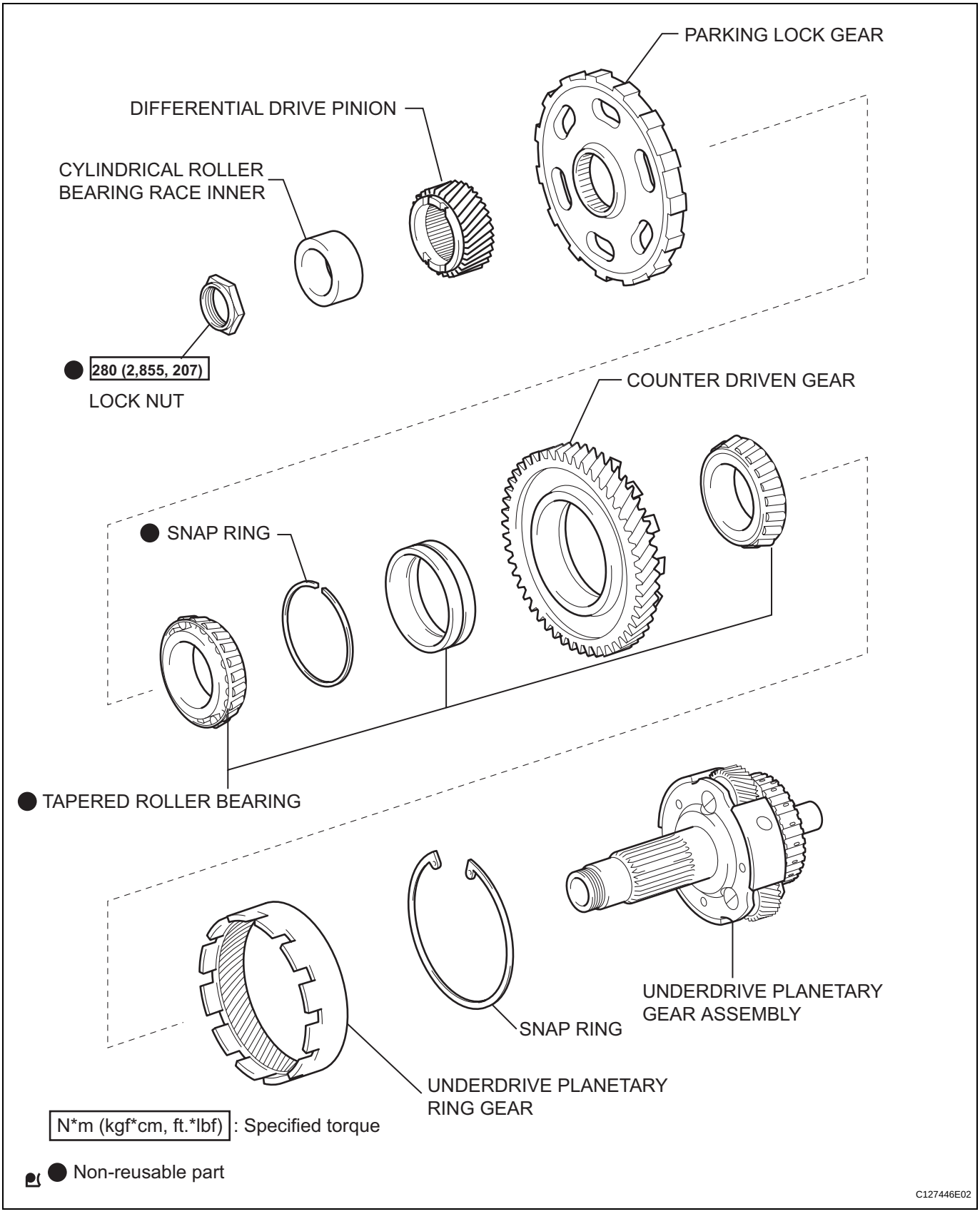
UNDERDRIVE PLANETARY GEAR

COMPONENTS



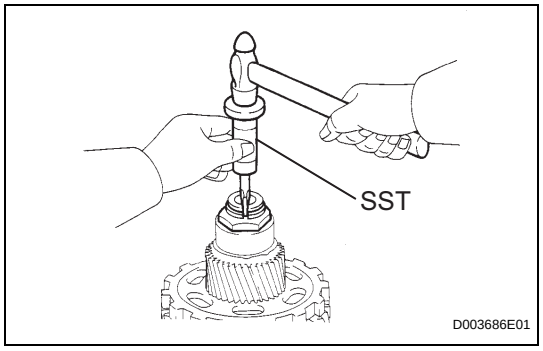
DISASSEMBLY

1. INSPECT UNDERDRIVE PLANETARY GEAR PRELOAD (See page AX-240)

2. REMOVE CYLINDRICAL ROLLER BEARING RACE INNER

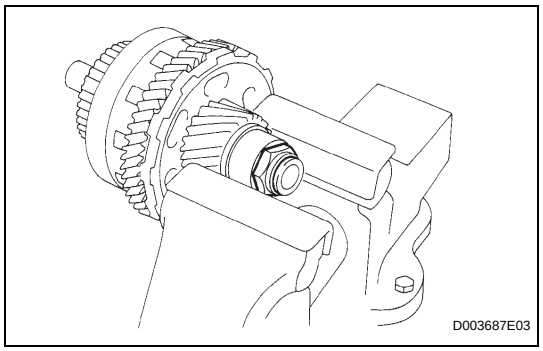
(a) Using SST, loosen the staked part of the nut.

SST 09930-00010 (09931-00010, 09931-00020), 09387-00050



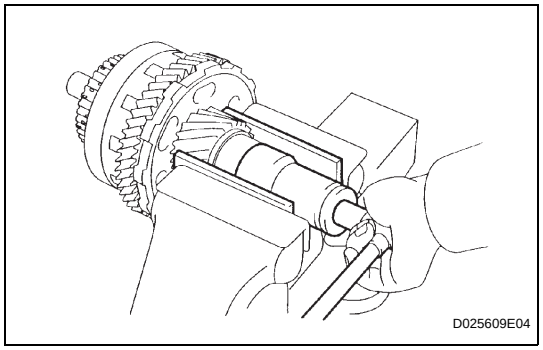
(b) Clamp the underdrive planetary gear in soft jaw vise.

NOTICE:
Be careful not to damage the differential drive pinion.



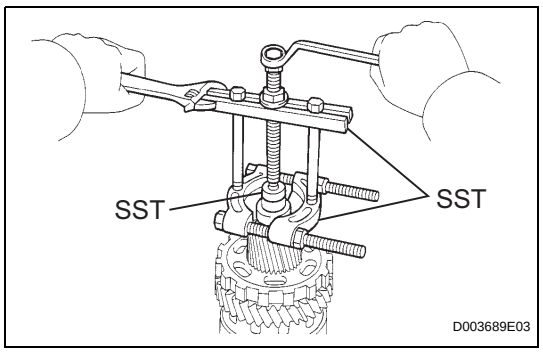
(c) Using SST, remove the lock nut.

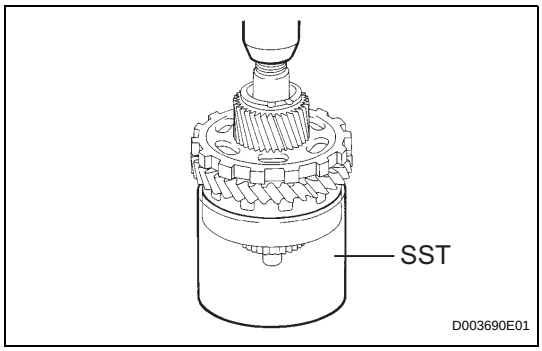
SST 09564-16020



(d) Using SST, remove the cylindrical roller bearing inner race.

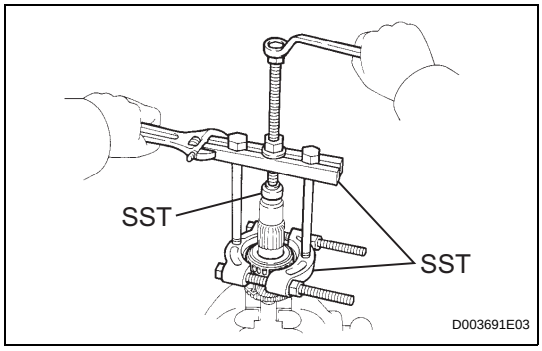
SST 09950-00020, 09950-00030, 09950-60010 (09951-00340)





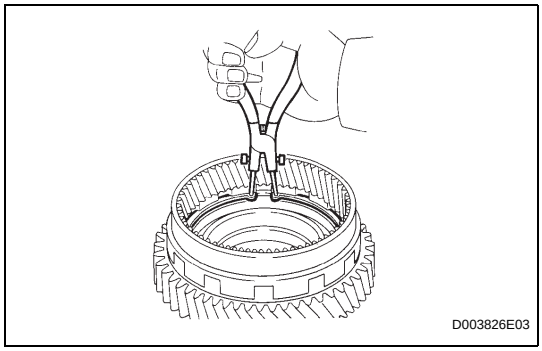
3. REMOVE UNDERDRIVE PLANETARY GEAR ASSEMBLY

(a) Using SST and a press, remove the differential drive pinion, parking lock gear, counter driven gear with underdrive planetary ring gear and front tapered roller bearing.
SST 09387-00050



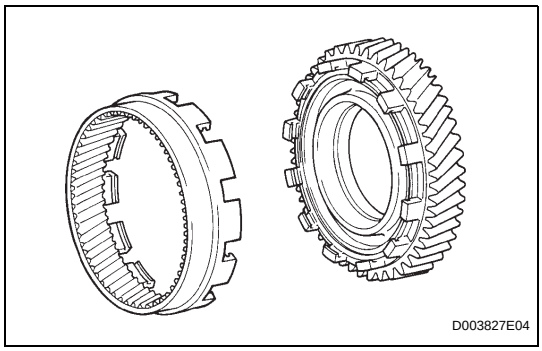
(b) Clamp the underdrive planetary gear in soft jaw vise.

(c) Using SST, remove rear tapered roller bearing from the underdrive planetary gear.
SST 09950-00020, 09950-00030, 09950-60010 (09951-00320)



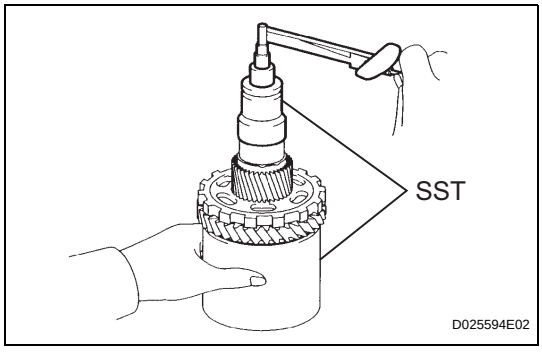
4. REMOVE UNDERDRIVE PLANETARY RING GEAR

(a) Using snap ring pliers, remove the snap ring.



(b) Remove the underdrive planetary ring gear from the counter driven gear.

INSPECTION

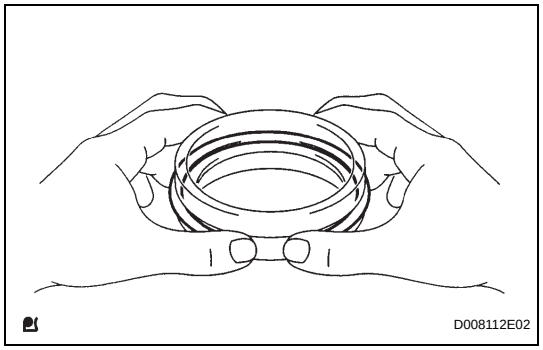


1. INSPECT UNDERDRIVE PLANETARY GEAR PRELOAD

(a) Using SST a torque wrench, measure the turning torque of the underdrive planetary gear assembly while rotating the torque wrench at 60 rpm.
SST 09387-00050, 09564-16020
Torque: Standard turning torque at 60 rpm
0.23 to 5.01 N*m (2 to 51 kgf*cm, 2.0 to 44.3 in.*lbf)

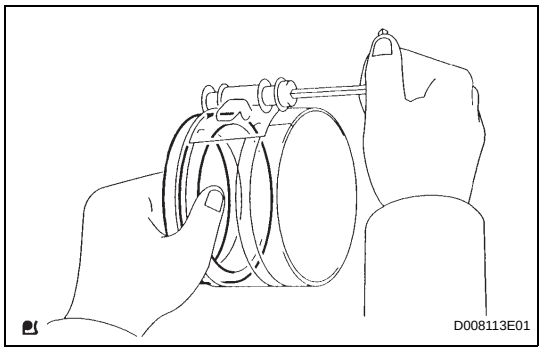
HINT:
Use a torque wrench with a fulcrum length of 160 mm (6.3 in.).

REASSEMBLY

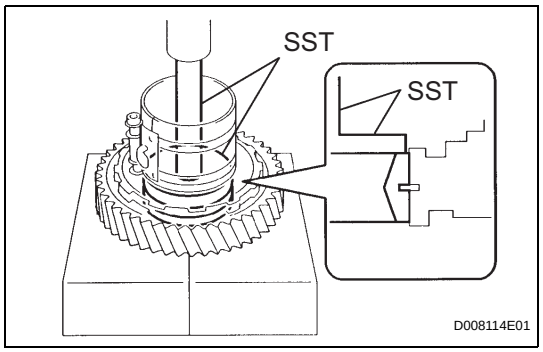


1. INSTALL UNDERDRIVE PLANETARY RING GEAR

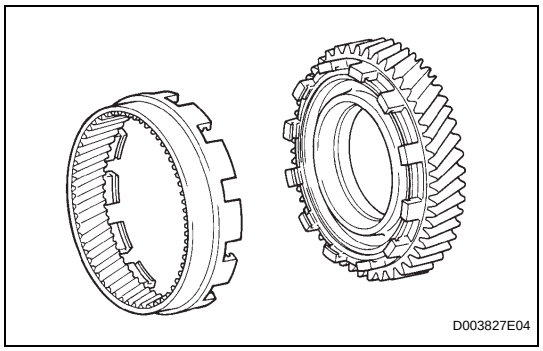
(a) Install a new snap ring to the outer race of the tapered roller bearing.



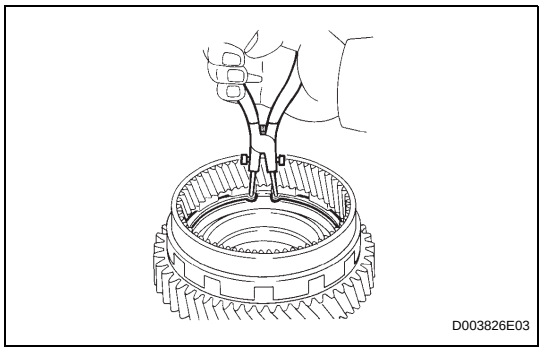
(b) Using a piston ring compressor, squeeze the snap ring.



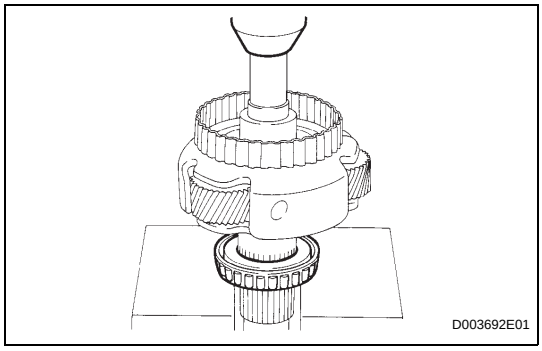
(c) Using SST a press, press in the outer race of the tapered roller bearing.
SST 09950-60020 (09951-00890), 09950-70010 (09951-07100)



(d) Install the underdrive planetary ring gear to the counter driven gear.

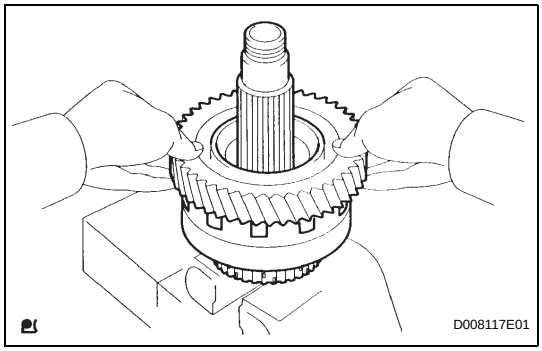


(e) Using snap ring pliers, install the snap ring.

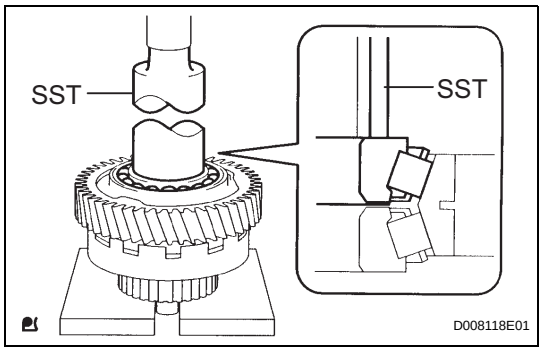


2. INSTALL UNDERDRIVE PLANETARY GEAR ASSEMBLY

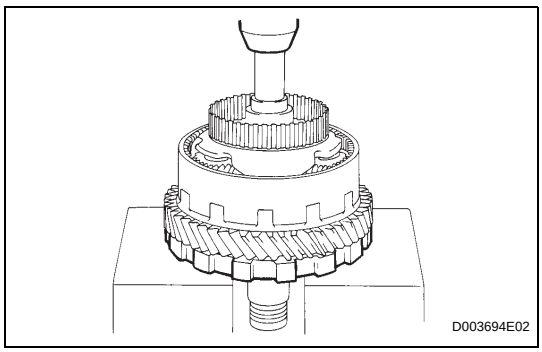
(a) Using a press, install the tapered roller bearing.



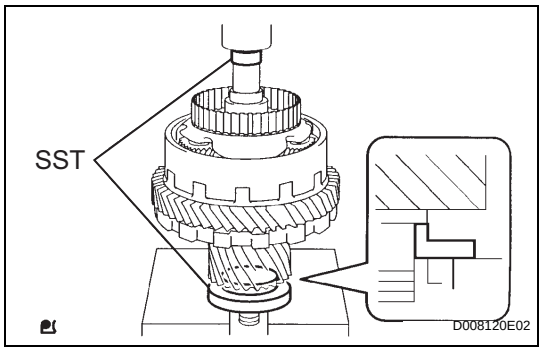
(b) Install the counter driven gear with planetary ring gear to the underdrive planetary gear.



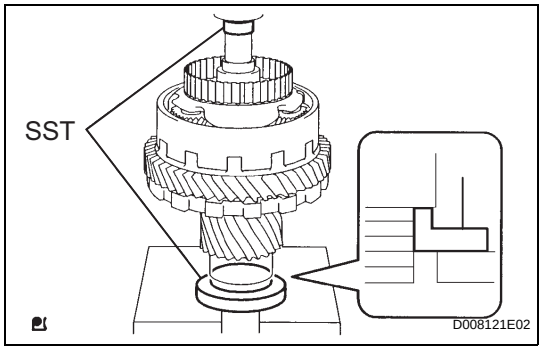
(c) Using SST and a press, press in the tapered roller bearing.
SST 09316-60011 (09316-00011)
NOTICE:
Press in the counter driven gear while rotating it.



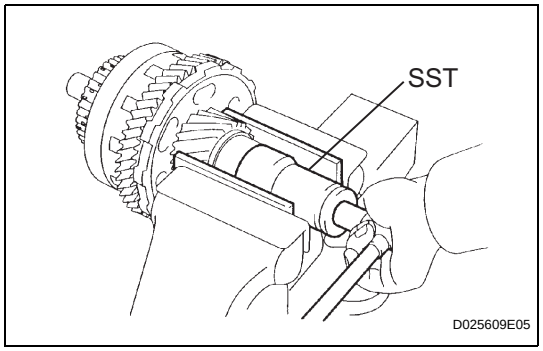
(d) Using a press, press in the parking lock gear.
NOTICE:
Press in the counter driven gear while rotating it.



(e) Using SST and a press, press in the differential drive pinion.
NOTICE:
Press in the counter driven gear while rotating it.
SST 09506-35010, 09950-60010 (09951-00250)

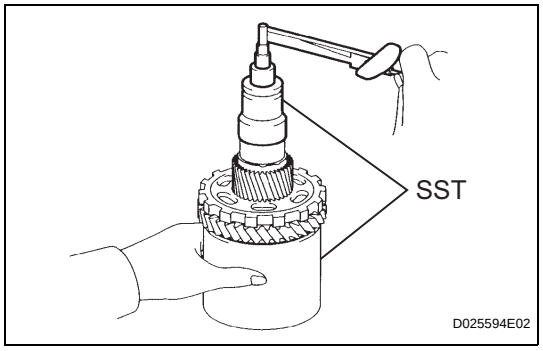


(f) Using SST and a press, press in the cylindrical roller bearing inner race.
NOTICE:
Press in the counter driven gear while rotating it.
SST 09506-35010, 09950-60010 (09951-00250)

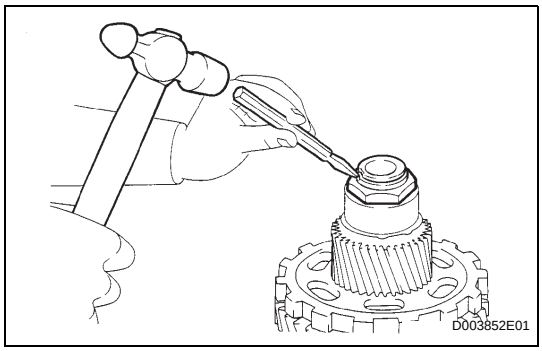


(g) Clamp the underdrive planetary gear in a soft jaw vise.
NOTICE:
Be careful not to damage the differential drive pinion.

(h) Using SST, install a new lock nut.
Torque: 280 N*m (2,855 kgf*cm, 207 in.*lbf)
SST 09564-16020
HINT:
Use a torque wrench with a fulcrum length of 750 mm (29.53 in.)



(i) Using SST and a torque wrench, measure the turning torque of underdrive planetary gear assembly while rotating the torque wrench at 60 rpm.
SST 09564-16020, 09387-00050
Torque: Standard turning torque at 60 rpm
0.23 to5.01 N*m (2 to 51 kgf*cm, 2.0 to 44.3 in.*lbf)
HINT:
Use a torque wrench with a fulcrum length of 160 mm (6.30 in.).



(j) Using a pin punch and hammer, stake the lock nut.
NOTICE:
Make sure that there are no cracks on the nut.